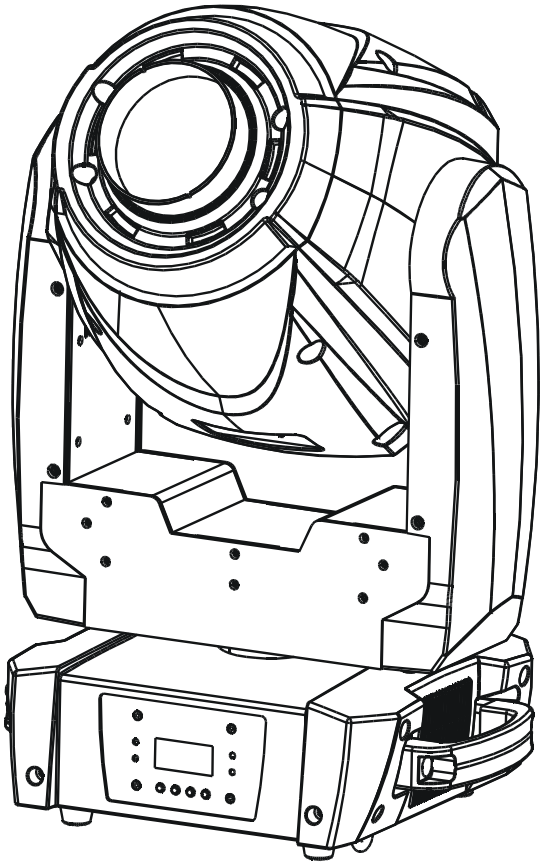
Led Move 600SE



LED-MS600SE

User Guide

Professional LED Moving Head

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1. Safety Instruction

WARNING

Please read carefully the instruction, which includes important information about the installation, usage and maintenance.

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully that there is no transportation damage before using the unit.
- The unit is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots are blocked, otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Maximum ambient temperature Ta: 40℃. DO NOT operate it when the temperature is higher.
- DO NOT connect the device to any dimmer pack.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- Make sure there are no flammable materials close to the unit while operating to avoid fire hazard.
- Examine the power wires carefully, replace them immediately if there is any damage.
- Unit's surface temperature may reach up to 85℃. DO NOT touch the housing bare-handed during its operation, and allow about 15 minutes for cooling the unit down before replacing bulb or maintenance as it could be very hot.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut

off the mains power immediately.

- DO NOT operate in dirty or dusty environment, do clean fixtures regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together twist other cables.
- The minimum distance between light output and the illuminated surface must be more than 2.5 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the unit as there are no user serviceable parts inside.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect the mains power if the fixture is has not been used for a long time.
- DO use the original packing materials before transporting it again.

Caution：

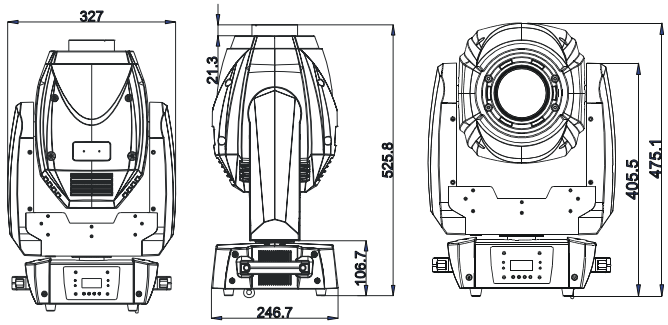
- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Hot lamp explosion hazard. Do not open the unit within 15 minutes after switching off.
- DO replace the bulb once it is damaged, deformed or life-expired.
- DO NOT look directly at the light while the bulb is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- DO NOT start on the unit without bulb enclosure or when housing is damaged.

2. Technical Specifications

- DMX Channels: 14&15 channels
- Great built-in lighting shows under Master/Slave mode triggered by music
- Smooth 0~100% dimming and variable strobe speeds

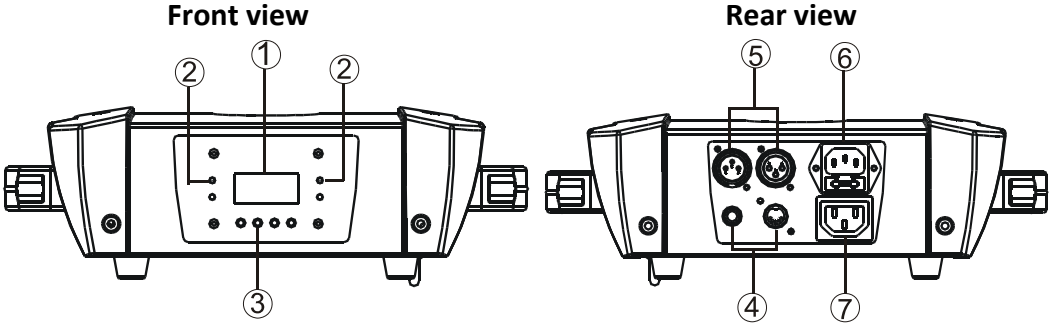
- Motorized focus by DMX control
- Automatic Pan/Tilt position correction
- Excellent ventilation, ensuring reliable operation

- **Voltage：** AC 100-240V~50/60Hz
- **Power consumption:** 226W
- **Light Source:** 1 x150W LED
- **Fuse:** 6.3A
- **Dimension:** 327 x 247 x 526mm
- **Weight:** 14Kgs



3. How To Set The Unit

3.1 Control Panel



① Display:

Show the various menus and the selected functions

② LED:

DMX	On	DMX input present
MASTER	On	Master Mode
SLAVE	On	Slave Mode
SOUND	Flashing	Sound activation

③ Button:

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

④ Only For Remote Control:

Connecting with CA-8/CA-9 RTX to control the unit for Stand by, Function and Mode function.

⑤ DMX input/output:

For DMX512 link, use 3/5-pin XLR plug cable to link the unit together.

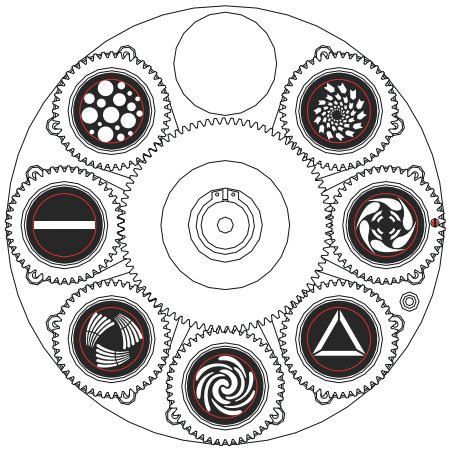
⑥ Mains input:

Connect to supply mains power.

⑦ Mains output:

Connect to supply mains power for the next unit.

3.2 Gobo Wheel



DANGER!

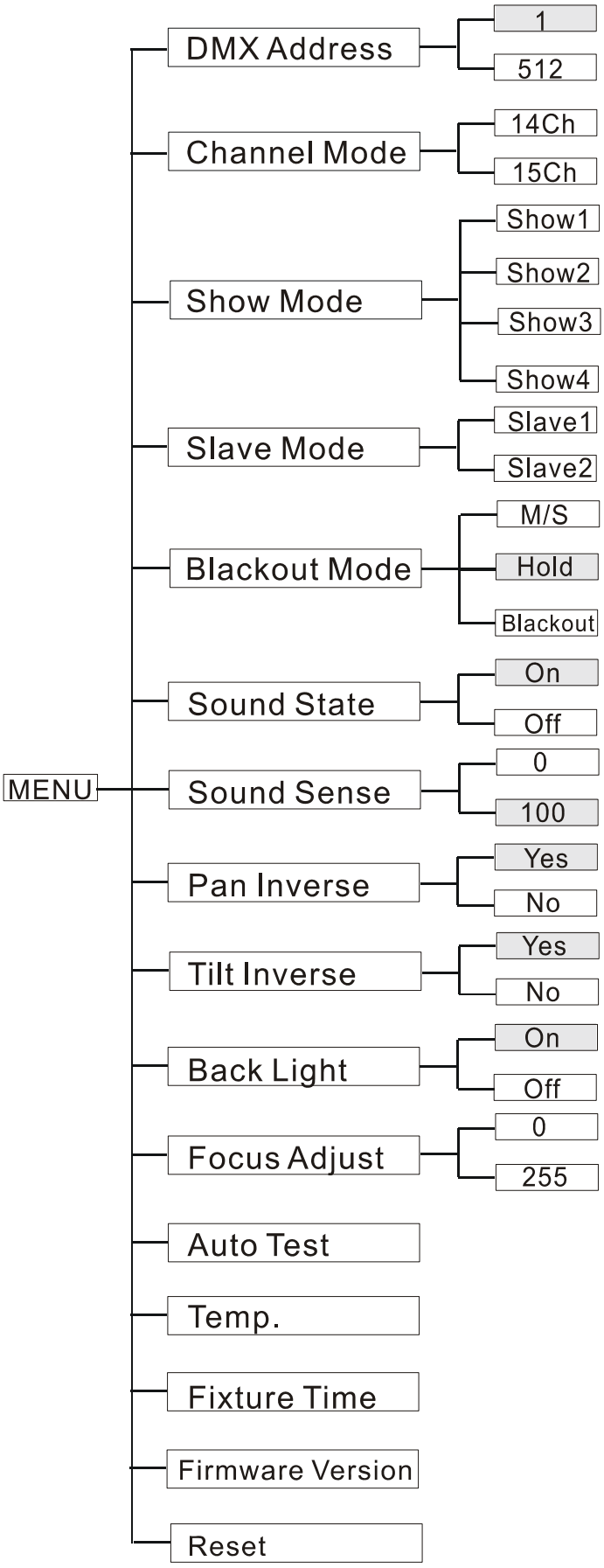
Install the gobos with the device switched off only.

Unplug from mains before changing gobos!

3.3 Main Function

To select any of the given functions, press the **MENU** button up to when the required one is showing on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, Press **ENTER** button to store. Back to the main functions without any change press the **MENU** button or wait for 8 seconds.
Hold **MENU** button to quit menu mode, the unit will run the built-in program you selected.

The main functions are shown below:


MENU
DMX Address
1
512
Channel Mode
14Ch
15Ch
Show Mode
Show1
Show2
Show3
Show4
Slave Mode
Slave1
Slave2
Blackout Mode
M/S
Hold
Blackout
Sound State
On
Off
Sound Sense
0
100
Pan Inverse
Yes
No
Tilt Inverse
Yes
No
Back Light
On
Off
Focus Adjust
0
255
Auto Test
Temp.
Fixture Time
Firmware Version
Reset

DMX Address

Select **DMX Address**, press the **ENTER** button to confirm, the present address will blink on the display. Use the **UP** and **DOWN** button to adjust the address from **1** to **512**. Once the address has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Channel Mode

Select **Channel Mode**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **14 Ch** or **15 Ch** Mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Show Mode

Select **Show Mode**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Show 1** or **Show 2** or **Show 3** or **Show 4** mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Slave Mode

Select **Slave Mode**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Slave 1** (normal) or **Slave 2** (2 light show) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Blackout Mode

Select **Blackout Mode**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **M/S** (Master/Slave), **Hold** or **Blackout** Mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Sound State

Select **Sound State**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **On** (sound on) or **Off** (sound off) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Sound Sense

Select **Sound Sense**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to change the sound sense from **0** …**100**. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Pan Inverse

Select **Pan Inverse**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Yes** (pan inversion) or **No** (normal) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Tilt Inverse

Select **Tilt Inverse**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **Yes** (tilt inversion) or **No** (normal) mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Back Light

Select **Back Light**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to select the **On** (LED on) or **Off** (LED off) Mode. Once the mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Focus Adjust

Select **Focus Adjust**, press the **ENTER** button to confirm, present mode will blink on the display. Use the **DOWN** and **UP** button to change the value from **0** …**255**. Once selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Auto Test

Select **Auto Test**, pressing **ENTER** button and the unit will run self-test by built-in program. To go back to the functions press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Temp.

Select **Temp.**, pressing **ENTER** button and the display will show the temperature of the unit. To go

back to the functions press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Fixture Time

Select **Fixture Time,** pressing **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Firmware Version

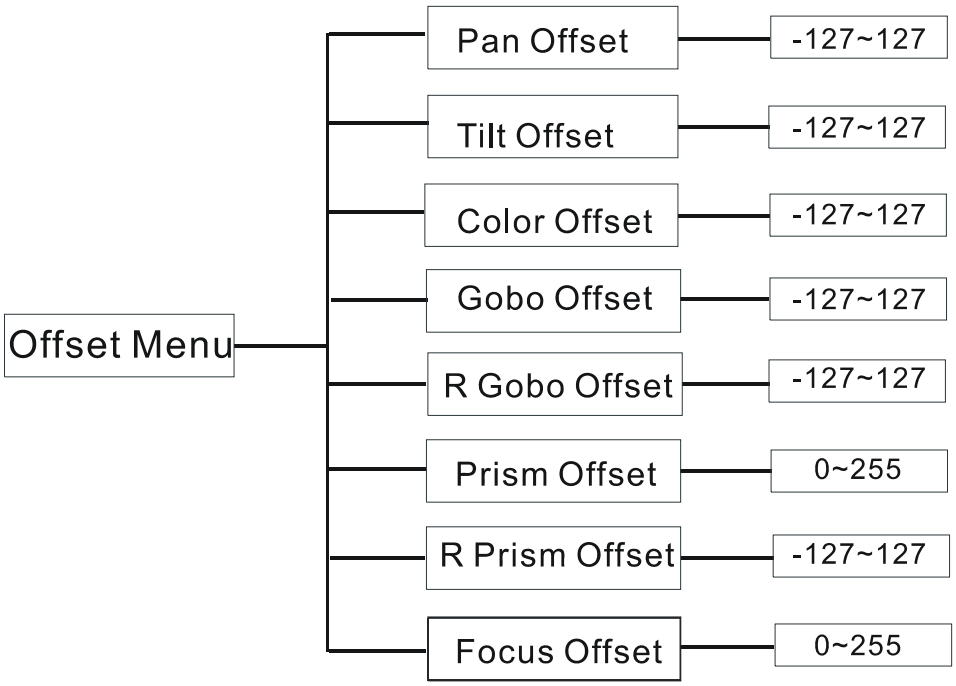
Select **Firmware Version,** pressing **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

Reset

Select **Reset**, pressing **ENTER** button and all channels of the unit will return to their standard position.

3.4 Home Position Adjustment

Press **MENU** button into menu mode, then press the **ENTER** button for about 3 seconds into offset mode to adjust the home position. Select the function by **ENTER** button. Use **UP** and **DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu. Press **MENU** button to exit.



Pan Offset—pan home position adjustment

Enter **Offset Menu**, Select **Pan Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -127 to 127, then press **ENTER** button to store. Press **MENU** button to exit.

Tilt Offset—tilt home position adjustment

Enter **Offset Menu**, Select **Tilt Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -127 to 127, then press **ENTER** button to store. Press **MENU** button to exit.

Color Offset—color home position adjustment

Enter **Offset Menu**, Select **Color Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -127 to 127, then press **ENTER** button to store. Press **MENU** button to exit.

Gobo Offset—gobo home position adjustment

Enter **Offset Menu**, Select **Gobo Offset**, press **ENTER** button to confirm, the present position will

blink on the display, use **UP/DOWN** button to offset the value from -127 to 127, then press **ENTER** button to store. Press **MENU** button to exit.

R Gobo Offset—gobo rotation home position adjustment

Enter **Offset Menu**, Select **R Gobo Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -127 to 127, then press **ENTER** button to store. Press **MENU** button to exit.

Prism Offset—prism home position adjustment

Enter **Offset Menu**, Select **Prism Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from 0 to 255, then press **ENTER** button to store. Press **MENU** button to exit.

R Prism Offset—prism rotation home position adjustment

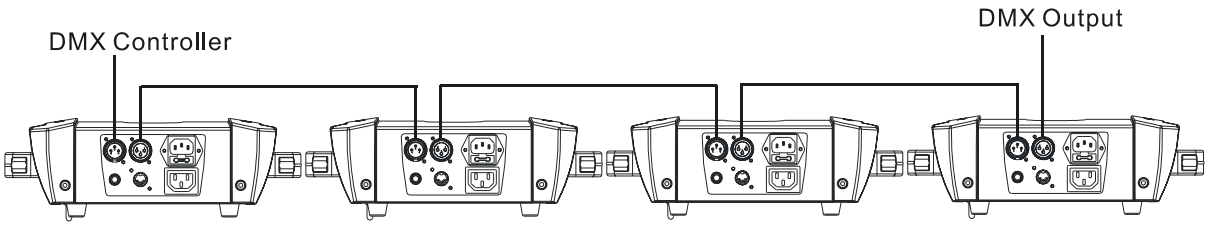
Enter **Offset Menu**, Select **R Prism Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -127 to 127, then press **ENTER** button to store. Press **MENU** button to exit.

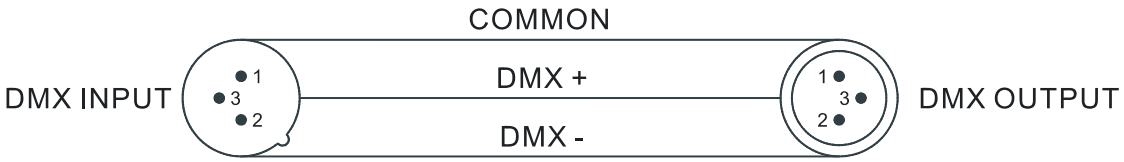
Focus Offset—focus home position adjustment

Enter **Offset Menu**, Select **Focus Offset**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from 0 to 255, then press **ENTER** button to store. Press **MENU** button to exit.

4. Control By Universal DMX Controller

4.1 DMX 512 Connection





Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal.
(Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.

1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 ohm 1⁄4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a `daisy chain` by XLR plug from the output of the unit to the input of the next unit. The cable can not branched or split to a `Y` cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when power is disconnected to the unit.
4. Each lighting unit needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pin XLR.

   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

   Pin 4⁄5: Not used.

4.2 DMX Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press MENU button to enter menu mode, select ***DMX Address***, press ENTER button to confirm, the present address will blink on the display, use UP and DOWN button to adjust the address from 0 to 512, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Please refer to the following diagram to address your DMX512 channel for the first 4 units:

Channel Mode	Unit 1	Unit 2	Unit 3	Unit 4
14 channels	1	15	29	43
15 channels	1	16	31	46

4.3 DMX512 Configuration

14 Channels Mode:

14 Channel Mode

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6
Pan	Pan Fine	Tilt	Tilt Fine	Pan/Tilt speed	Dimmer
255 540° 0 0°	255 0	255 270° 0 0°	255 0	255 Fast 254 Slow 0 Fast	255 100% 0 0%

Ch7	Ch8	Ch9	Ch10
Strobe	Color	Gobo	R-Gobo
248-255 Open 240-247 Random Strobe 232-239 Open 190-231 Fast Open Slow Close 182-189 Open 140-181 Fast Close Slow Open 132-139 Open 016-131 Fast … Slow 008-015 Open 000-007 Off	255 Fast … 194 Slow 190-193 Stop 189 Slow … 128 Fast 064-127 Index 056-063 Color 8 048-055 Color 7 040-047 Color 6 032-039 Color 5 024-031 Color 4 016-023 Color 3 008-015 Color 2 000-007 Color 1	255 Fast … 194 Slow 190-193 Stop 189 Slow … 128 Fast 119-127 Gobo7 shaking 110-118 Gobo6 shaking 101-109 Gobo5 shaking 092-100 Gobo4 shaking 083-091 Gobo3 shaking 074-082 Gobo2 shaking 064-073 Gobo1 shaking 056-063 Gobo7 048-055 Gobo6 040-047 Gobo5 032-039 Gobo4 024-031 Gobo3 016-023 Gobo2 008-015 Gobo1 000-007 Open	255 Rotation Fast … Slow 194 Rotation 190-193 Stop 189 Rotation Slow … Fast 128 Rotation 127 Prism Index 360° 000 Prism Index 0°

Ch11	Ch12	Ch13	Ch14
Prism	R-Prism	Focus	Function
128-255 Prism Effect 000-127 No Effect	255 Fast … 194 Slow 190-193 Stop 189 Slow … 128 Fast 127 Prism Index 360° 000 Prism Index 0°	255 … 0	230-255 Null 220-229 Disable Blackout while Pan/Tilt Moving or Color or Gobo change 210-219 Enable Blackout while Pan/Tilt Moving or Color or Gobo change 200-209 Reset All 190-199 Null 180-189 Focus Reset 170-179 Null 160-169 Gobo Reset 150-159 Color Reset 140-149 Pan/Tilt Reset 130-139 Null 120-129 Disable Blackout while Gobo Change 110-119 Enable Blackout while Gobo Change 100-109 Disable Blackout while Color Change 090-099 Enable Blackout while Color Change 080-089 Disable Blackout while Pan/Tilt Moving 070-079 Enable Blackout while Pan/Tilt Moving 000-069 Null

15 Channels Mode:

15 Channels Mode

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7
Pan	Pan Fine	Tilt	Tilt Fine	Pan/Tilt speed	Dimmer	Strobe
255 540° 0 0°	255 0	255 270° 0 0°	255 0	255 Fast 254 Slow 0 Fast	255 100% 0 0%	248-255 Open 240-247 Random Strobe 232-239 Open 190-231 Fast Open Slow Close 182-189 Open 140-181 Fast Close Slow Open 132-139 Open 016-131 Fast / Slow 008-015 Open 000-007 Off

Ch8	Ch9	Ch10	Ch11	Ch12
Color	Gobo	R-Gobo	Prism	R-Prism
255 Fast 194 Slow 190-193 Stop 189 Slow 128 Fast 064-127 Index 056-063 Color 7 048-055 Color 6 040-047 Color 5 032-039 Color 4 024-031 Color 3 016-023 Color 2 008-015 Color 1 000-007 Open	255 Fast 194 Slow 190-193 Stop 189 Slow 128 Fast 119-127 Gobo7 shaking 110-118 Gobo6 shaking 101-109 Gobo5 shaking 092-100 Gobo4 shaking 083-091 Gobo3 shaking 074-082 Gobo2 shaking 064-073 Gobo1 shaking 056-063 Gobo7 048-055 Gobo6 040-047 Gobo5 032-039 Gobo4 024-031 Gobo3 016-023 Gobo2 008-015 Gobo1 000-007 Open	255 Rotation Fast Slow 194 Rotation 190-193 Stop 189 Rotation Slow Fast 128 Rotation 127 Gobo Index 360° 000 Gobo Index 0°	128-255 Prism Effect 000-127 No Effect	255 Fast 194 Slow 190-193 Stop 189 Slow 128 Fast 127 Prism Index 360° 000 Prism Index 0°

Ch13	Ch14	Ch15
Focus	Function	Color Speed
255 0	230-255 Null 220-229 Disable Blackout while Pan/Tilt Moving or Color or Gobo change 210-219 Enable Blackout while Pan/Tilt Moving or Color or Gobo change 200-209 Reset All 190-199 Null 180-189 Focus Reset 170-179 Null 160-169 Gobo Reset 150-159 Color Reset 140-149 Pan/Tilt Reset 130-139 Null 120-129 Disable Blackout while Gobo Change 110-119 Enable Blackout while Gobo Change 100-109 Disable Blackout while Color Change 090-099 Enable Blackout while Color Change 080-089 Disable Blackout while Pan/Tilt Moving 070-079 Enable Blackout while Pan/Tilt Moving 000-069 Null	255 Fast 254 Slow 0 Fast

Gobo

Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7

5. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

D. The lamp is cutting out intermittently

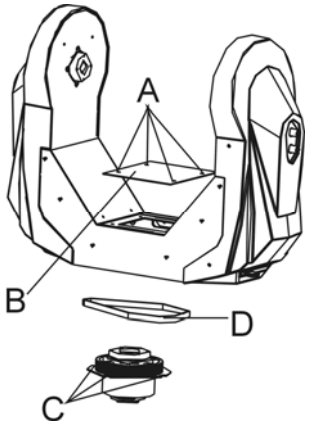
1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

E. If the pan belt is broken

1. Turn off the mains power.
2. Loosen the screws (A)，open the cover (B).
3. Loosen the screws (C).
4. Unplug all the connect wires over the belt.
5. Change a new belt (D), put the belt around the axis gear and motor gear.

6. Plug all the connect wires back upon the belt.

7. Tighten all the screws.



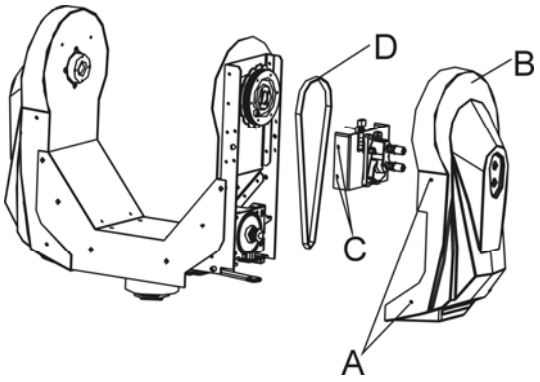
F. If the tilt belt is broken

1. Turn off the mains power.

2. Loosen all the screws (A) and open the right arm cover (B).

3. Loosen the screws (C) that fix the bridge.

4. Change a new belt (D). Please adjust the tension of the belt properly.



Note: do not fix the belt too tight as it is can easily rupture.

Reverse the procedures from step 3 to 2.

6. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30⁄60 days.

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

&

Harmonized Standard

EN 60598-1:2008 + All:2009; EN 60598-2-17:1989 + A2:1991; EN 62471:2008; EN 62493: 2010
Safety of household and similar electrical appliances
Part 1: General requirements

Innovation, Quality, Performance